#### **REMARKS**

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated April 23, 2004. In view of above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

# Status of the Claims

Claims 2-9 and 11-18 are under consideration in this application. Claims 1 and 10 are being cancelled without prejudice or disclaimer. Claims 2, 4-7, 9 and 11-18 are being amended, as set forth in the above marked-up presentation of the claim amendments, in order to more particularly define and distinctly claim applicants' invention.

#### Additional Amendments

The specification and the claims are being amended to correct formal errors and/or to better disclose or describe the features of the present invention as claimed. All the amendments to the claims are supported by the specification. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

#### Formality Rejections

The specification and claims 1-18 were objected for various informalities and requested corrections thereof. Claims 5-9 and 14-18 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. As indicated, the claims have been amended as required by the Examiner. In particular, the relevant portions in claims 2 and 11 were clarified as that "the interface circuit 30 includes (1) a storage unit 32 to hold a state of the output of the first circuit block 11 and (2) a signal gate unit 31 which is provided between the storage unit 32 and the output of the first circuit block 11 (e.g., Fig. 1)." Accordingly, the withdrawal of the outstanding informality rejection is in order, and is therefore respectfully solicited.

# **Double Patenting Rejection**

Claims 5 and 14 were rejected under judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of US Patent No. 6,639,454. Further, he rejected claims 1 and 10 under obviousness-type double patenting as being unpatentable over claim 2 and/or claim 3 of the same patent (USP 6,639,454). As claims 1 and 10 are being cancelled without prejudice or disclaimer, and a terminal disclaimer is filed herewith for claims 5 and 14, the claims are in condition for allowance.

# **Allowed Subject Matters**

The Examiner previously indicated that claims 2-4 and 11-13 would be allowed if they are rewritten in independent form to include limitations of the base claim and intervening claims, and claims 6, 8-9, 15, and 17-18 would be allowed if they are rewritten to overcome the rejections of 35 U.S.C. § 112, second paragraph. Furthermore, claims 5 and 14 would be allowed if the double patenting rejections and rejections under 35 U.S.C. § 112 could be overcome. As indicated, the claims have been amended as required by the Examiner. Accordingly, the claims are in condition for allowance.

# **Prior Art Rejection**

Claims 1, 7, 10 and 16 under 35 U.S.C. § 102(e) on the grounds of being anticipated by Ooishi (6,433,586). The prior art reference of Coughlin et al. (6,493,257) was cited as being pertinent to the present application. As claims 1 and 10 are being cancelled without prejudice or disclaimer, and claims 7 and 16 are being amended to depend from the allowed claims, this rejection thus becomes moot.

#### Conclusion

In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and phone number indicated below.

Respectfully submitted,

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